



Farmer Questionnaire

Product: insect protected YieldGard® maize

Farmer personal and confidential data

Farmer's name:	[free text]
Farmer's address:	[free text]
City:	[harmonised text]
Postal code:	[harmonised text]
Interviewer's name:	[harmonised text]
Date of interview:	[DD / MM / YYYY]

The personal data of the farmer will be handled in accordance with applicable data protection legislation. The personal data of the farmers may be used for the purpose of interviews necessary for the survey if the farmers have authorised this use as per the data protection legislation.

The questionnaires will be encoded to protect farmers' identity in the survey and confidentiality agreements will be put in place between the different parties (i.e. authorisation holders, licensees, interviewers and analyst) to further enforce this. The identity of a farmer will only be revealed to the authorisation holders if an adverse effect linked to their trait has been identified and needs to be investigated.

Furthermore, the agreements between the different parties will also ensure that any information collected in the questionnaires will not be improperly shared or used.

Metadata

	Metadata
Year	[Choose from list]
Event	[Choose from list]
Partner*	[Choose from list]
Country	[Choose from list]
Interviewer**	[Choose from list]
Farmer (unique ID for each farmer)	[Number]

* Partner is the organization that implements the survey.

** Interviewer is the employee from the Partner that is contacting the farmers.

1 Maize growing area

1.1 Location:

Province: [Choose from List]

1.2 Size and number of maize fields:

Provide the number of fields and total area of fields planted with YieldGard® maize, conventional maize and overall, in the following table:

	YieldGard® maize	Conventional maize	Total
Number of fields	[number]	[number]	[number]
Total area of fields	[number]	[number]	[number]

1.3 Details for up to five fields:

Randomly choose

- up to five of the fields where YieldGard® maize was planted this season and
- up to five of the fields where conventional maize was planted this season

and provide the following details:

	Name or ID/ Location/ Municipality	YieldGard® maize variety planted this season
YG Field #1	[free text]	[harmonised text]
YG Field #2	[free text]	[harmonised text]
YG Field #3	[free text]	[harmonised text]
YG Field #4	[free text]	[harmonised text]
YG Field #5	[free text]	[harmonised text]

	Name/ Location/ Identifier	Conventional maize variety planted this season
Conv Field #1	[free text]	[harmonised text]
Conv Field #2	[free text]	[harmonised text]
Conv Field #3	[free text]	[harmonised text]
Conv Field #4	[free text]	[harmonised text]
Conv Field #5	[free text]	[harmonised text]

If no conventional maize field was planted:

You did not plant conventional maize this season. However, throughout this questionnaire you will be asked to compare different aspects of your YieldGard® maize to that of conventional maize. Tell us what conventional maize you will use for the comparisons:

[Choose: „Conventional maize planted by neighbouring farmers“/„Conventional maize planted on my farm last year“/“other“]

If „other“ was chosen as an answer:

Specify what is meant by „other“: [free text]

At this point in the questionnaire a step must be taken in the background: One of the YG Fields and one of the Conv Fields should be picked randomly. These randomly chosen fields should then replace the YG Field #X and Conv Field #X for all questions below. This guarantees that for those questions which should specifically be answered regarding a single field, this single field is drawn (somewhat) randomly for each farmer.

Chosen YieldGard field: [Choose: YG Field #1/ YG Field #2/ YG Field #3/ YG Field #4/ YG Field #5]

Chosen Conv field: [Choose: Conv Field #1/ Conv Field #2/ Conv Field #3/ Conv Field #4/ Conv Field #5/ Neighbour / Last Year / Other]

1.4 Local insect pest pressure in maize fields:

How is the general insect pest pressure in all maize fields in the current season?

[Choose: Low/As Usual/High]

If "High" is chosen as an answer:

List up to five insect pests prevalent in the maize fields

1. [harmonised text]
2. [harmonised text]
3. [harmonised text]
4. [harmonised text]
5. [harmonised text]

How is the corn borer pressure in all maize fields in the current season?

[Choose: Low/As Usual/High]

If "High" is chosen as an answer:

Indicate the corn borer species prevalent in the maize fields

[Choose: European corn borer (*Ostrinia nubilalis*) / Mediterranean corn borer (*Sesamia spp*)/
Cannot differentiate]

1.5 Local weed pressure in maize fields:

List up to five of the most typical weeds in all maize fields:

1. [harmonised text]
2. [harmonised text]
3. [harmonised text]
4. [harmonised text]
5. [harmonised text]

Where there any unusual observations regarding weeds in YieldGard® maize compared to conventional maize?

[Choose: Yes/No/Don't know]

If „Yes“ was chosen as an answer:

Specify the unusual observations: [free text]

2 Observations on integrated pest management practices in YieldGard® maize (compared to conventional maize)

2.1 Crop rotation:

For **YG Field #X** (as listed in 1.3), list the crops planted during the last two years (with one or two plantings per year, respectively):

Indicate year and planting period [Early season (Feb-Apr)/ Late season (May-Jul)]	Crop planted on YG Field #X	If Crop was maize, was it YieldGard® or conventional?	If Crop was maize, name the variety
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]

For **Conv Field #X** (as listed in 1.3), list the crops planted during the last two years (with one or two plantings per year, respectively):

Indicate year and planting period [Early season (Feb-Apr)/ Late season (May-Jul)]	Crop planted on Conv Field #X	If Crop was maize, was it YieldGard® or conventional?	If Crop was maize, name the variety
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]
YYYY/Planting period	[harmonised text]	[Choose: YieldGard/ Conventional]	[harmonised text]

How was your crop rotation for YieldGard® maize compared with conventional maize?
[Choose: As usual/Changed]

If „Changed“ was chosen as an answer:

Specify why the crop rotation was changed: [free text]

2.2 Time of maize sowing

For **YG Field #X** (as listed in 1.3), when did you sow?
[Date-start – Date-end]

For **Conv Field #X** (as listed in 1.3), when did you sow?
[Date-start – Date-end]

Did you sow YieldGard® maize earlier or later than conventional maize?
[Choose: Earlier/Later/No difference]

If „Earlier“ or „Later“ was chosen as an answer:

Why did you sow YieldGard® maize earlier or later than conventional:
[free text]

2.3 Time of maize harvest

For YG Field #X (as listed in 1.3), when did you harvest?
[Date-start – Date-end]

For Conv Field #X (as listed in 1.3), when did you harvest?
[Date-start – Date-end]

Did you harvest YieldGard® maize earlier or later than conventional maize?
[Choose: Earlier/Later/No difference]

If „Earlier“ or „Later“ was chosen as an answer:

Why did you harvest YieldGard® maize earlier or later than conventional:
[free text]

2.4 Corn borer control practices

For YG Field #X (as listed in 1.3), name the corn borer control practices you applied:

	Was applied	If „Yes“, name up to five	If „Yes“, comment
Insecticides	[Choose: Yes/No]	1. [harmonised text] 2. [harmonised text] 3. [harmonised text] 4. [harmonised text] 5. [harmonised text]	1. [free text] 2. [free text] 3. [free text] 4. [free text] 5. [free text]
Biocontrol treatments	[Choose: Yes/No]	1. [harmonised text] 2. [harmonised text] 3. [harmonised text] 4. [harmonised text] 5. [harmonised text]	1. [free text] 2. [free text] 3. [free text] 4. [free text] 5. [free text]
Other	[Choose: Yes/No]	1. [harmonised text] 2. [harmonised text] 3. [harmonised text] 4. [harmonised text] 5. [harmonised text]	1. [free text] 2. [free text] 3. [free text] 4. [free text] 5. [free text]
None	[Choose: Yes/No]	-	[free text]

For Conv Field #X (as listed in 1.3), name the corn borer control practices you applied:

	Was applied	If „Yes“, name up to five	If „Yes“, comment
Insecticides	[Choose: Yes/No]	1. [harmonised text] 2. [harmonised text] 3. [harmonised text] 4. [harmonised text] 5. [harmonised text]	1. [free text] 2. [free text] 3. [free text] 4. [free text] 5. [free text]
Biocontrol treatments	[Choose: Yes/No]	1. [harmonised text] 2. [harmonised text] 3. [harmonised text] 4. [harmonised text] 5. [harmonised text]	1. [free text] 2. [free text] 3. [free text] 4. [free text] 5. [free text]
Other	[Choose: Yes/No]	1. [harmonised text] 2. [harmonised text] 3. [harmonised text] 4. [harmonised text] 5. [harmonised text]	1. [free text] 2. [free text] 3. [free text] 4. [free text] 5. [free text]
None	[Choose: Yes/No]	-	[free text]

What is the overall efficacy of the GM varieties on the two insects controlled by YieldGard® maize?

	Overall efficacy	Additional Comment
European corn borer (Ostrinia nubilalis)	[Choose: Very good/ Good/ Weak/ Don't know]	[free text]
Mediterranean corn borer (Sesamia spp)	[Choose: Very good/ Good/ Weak/ Don't know]	[free text]

If „Weak“ was chosen as an answer:

Specify the reasons for the overall weak efficacy of the YieldGard® varieties:

[free text]

3 Observations on development and performance of YieldGard® maize (compared to conventional maize)

3.1 Susceptibility of YieldGard® maize to OTHER insect pests

Excluding European corn borer (*Ostrinia nubilalis*) and Mediterranean borer (*Sesamia* spp), what was the overall susceptibility of YieldGard® maize on YG Field #X compared to conventional maize on Conv Field #X?

[Choose: As usual/More susceptible/Less susceptible]

If „More susceptible/Less susceptible“ was chosen as an answer:

List up to five insect pests and compare the susceptibility of YieldGard® maize to that of conventional maize:

	Insect pest	Compared to conventional maize on Conv Field #X, YieldGard® maize on YG Field #X was	Additional comment
Insect pest #1	[harmonized text]	[Choose: More Susceptible/ Less susceptible]	[free text]
Insect pest #2	[harmonized text]	[Choose: More Susceptible/ Less susceptible]	[free text]
Insect pest #3	[harmonized text]	[Choose: More Susceptible/ Less susceptible]	[free text]
Insect pest #4	[harmonized text]	[Choose: More Susceptible/ Less susceptible]	[free text]
Insect pest #5	[harmonized text]	[Choose: More Susceptible/ Less susceptible]	[free text]

To control the above insect pests, indicate the number of treatments applied to YieldGard® maize on YG Field #X and to conventional maize on Conv Field #X

	Number of treatments applied to		Additional comment
	YieldGard® maize on YG Field #X	conventional maize on Conv Field #X	
Insecticide	[number]	[number]	[free text]
Biocontrol	[number]	[number]	[free text]
Other	[number]	[number]	[free text]

3.2 Characteristics of YieldGard® maize in the field

Are there any unusual observations on the growth and performance of the YieldGard® maize on YG Field #X compared to conventional maize on Conv Field #X (e.g. emergence, incidence of stalk/root lodging, maturity, yield)?

[Choose: Yes/No/Don't Know]

If „Yes“ was chosen as an answer:

Specify unusual observations on the growth and performance of the YieldGard® maize compared to conventional maize: [free text]

3.3 Any additional remarks or observations due to YieldGard® maize

List any unusual observations due to YieldGard® maize on YG Field #X compared to conventional maize on Conv Field #X (e.g. benefits / unusual harms to animals and the environment)

[free text]

4 Implementation of Bt-maize specific measures

4.1 Good agricultural practices for YieldGard® maize

Have you been informed on good agricultural practices for YieldGard® maize?

[Choose: Yes/No]

If „Yes“ was chosen as an answer:

Would you evaluate these technical sessions as:

[Choose: Very useful/Useful/Not useful]

4.2 Seed

Was the seed bag labelled with information that the seed is genetically modified YieldGard® maize?

[Choose: Yes/No/I did not pay attention]

Did the seed bag labelling include recommendations on how to cultivate genetically modified YieldGard® maize?

[Choose: Yes/No/I did not pay attention]

Did you comply with the label recommendations on seed bags?

[Choose: Yes/No]

If „No“ was chosen as an answer:

Specify why you did not comply with the label recommendations

[free text]

4.3 Prevention of insect resistance

Did you plant a refuge in accordance with the technical guidelines?

[Choose: Yes/No because the total area of YieldGard® is ≤ 5 ha/No]

If „No“ was chosen as an answer:

Specify why you did not plant a refuge although having planted > 5 ha YieldGard® maize on your farm

[free text]

4.4 Questions related to sustainability of YieldGard® maize technology

How many years have you cultivated YieldGard® maize varieties? [number]

What are the reasons for you to cultivate YieldGard varieties? [free text]

What is your balance of the use of GM maize? (Regarding insecticide application, production and quality of grain or silage, etc.) [free text]

What is the economic balance of using GM maize? (Indicate which factor most affected the increase/decrease of revenue and expenses) [free text]

Are you going to plant GM maize again?

[Choose: Yes/No]

Please explain the decision reason(s) [free text]